PTO/SB/05 (05-03)
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## UTILITY **PATENT APPLICATION**

Under the Paperwork Reduction Act of 1995, no persons are requ	uired to re			of information unless it displays a valid OMB control nur	
UTILITY		ey Docket	No.	105447-2	
		First Inventor Ar		Anthony Atala, et al.	
PATENT APPLICATION	ENHA		ANCEMENT OF ANGIOGENESIS TO		
TRANSMITTAL	Title	GRAF1	BRAFTS USING CELLS ENGINEERED TO PRODUCE GROWTH FACTORS		
(Only for new nonprovisional applications under 37 CFR 1.53(b))		PROD			
	Express Mail Label No.			EV 318982024 US	
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IRANSMITIAL	Title	GRAFTS USING CELLS ENGINEERED TO					
(Only for new nonprovisional applications under 37 CFR 1.53(b))		PRODUCE GROWTH FACTORS					
	Expre	ess Mail Label No. EV 318982024 US					
APPLICATION ELEMENTS  See MPEP chapter 600 concerning utility patent application co	ontents.	Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450					
X Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing)     X Applicant claims small entity status. See 37 CFR 1.27.  3. X Specification (Total Pages 9)	<b>7</b> 1	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a. Computer Readable Form (CRF)					
(preferred arrangement set forth below)  - Descriptive title of the invention  - Cross Reference to Related Applications  - Statement Regarding Fed sponsored R & D  - Reference to sequence listing, a table, or a computer program listing appendix  - Background of the Invention	·	b. Specification Sequence Listing on:  iCD-ROM or CD-R (2 copies); oriiPaper  cStatements verifying identity of above copies  ACCOMPANYING APPLICATIONS PARTS					
- Brief Summary of the Invention		9. A copy of Assignment from parent filing					
- Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure  4. X Drawing(s) (35 U.S.C. 113) [Total Sheets]	9 ]	10. 37 CFR 3.73(b) Statement Power of (when there is an assignee)  11. English Translation Document (if applicable)					
5. Declaration/POA [Total Sheets	4 ]	12. Information Disclosure Copies of IDS					
a. X unexecuted	Statement (IDSVPTO-1449  Citations lited  Preliminary Amendment						
b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed)  14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized)  Certified Copy of Priority Document(s)							
i. DELETION OF INVENTOR(S) Signed statement attached deleting		L (if foreign priority is claimed)					
inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).		Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.					
		17. Other:					
6. X Application Data Sheet. See 37 CFR 1.76							
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:  Continuation Divisional Continuation-in-part (CIP) of prior application No.:  Prior application information: Examiner Art Unit:  For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or deciaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.							
19. COI	RRESPO	ONDENCE ADDRESS					
X Customer Number or Bar Code Label	(	021125 or X Correspondence address below					
NUTTER MCCLENNEN & FISH LLP Deborah A. Miller, Ph.D.							
World Trade Center West 155 Seaport Boulevard							
City Boston Sta	ate	MA   Zip Code   02210-2604					
Country US Te	lephone	(617) 439-2863 Fax (617) 310-9863					
Name (Print/Type) Deborah A. Miller, Ph.D		Registration No. (Attorney/Agent) 53,328					
Signature Dubla. M	ill	Date January 28, 2004					
Utility Patent Application Transmittal  I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 318982024 US, in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.							

Dated: January 28, 2004

\_ (Deborah A. Miller, Ph.D.)

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FEE TRANSMITTAL									
		Application Number							
for FY 2004	ŀ	Filing Date			Herewith				
Effective 01/01/2003, Patent fees are subject to annual revision.	First Named Inventor								
		Exam	iner Na	ame	Not yet assigned				
X Applicant claims small entity status. See 37 CFR 1.27		Art Unit			Not yet assigned				
TOTAL AMOUNT OF PAYMENT (\$) 536.00		Attom	ey Do	cket No	o. 105447-2				
METHOD OF PAYMENT (check all that apply)		FEE CALCULATION (continued)							
X Check Credit Money Other None  Deposit Account	3. ADDITIONAL FEES								
Deposit		Entity		Entity	_				
Account 141449 Number	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description Fee Paid				
Deposit Account Nutter McClennen & Fish LLP	1051	130	2051	65	Surcharge – late filing fee or oath				
Account Nutter McClennen & FISH LLP Name The Director is hereby authorized to: (check all that apply)	1052	50	2052	25	Surcharge late provisional filing fee or cover sheet.				
Charge fee(s) indicated below X Credit any overpayments	1053	130	1053	130	Non-English specification				
X Charge any additional fee(s) during the pendency of this	1812	2,520	1812	2,520	For filing a request for ex parte reexamination				
application  Charge fee(s) indicated below, except for the filing fee	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action				
to the above-identified deposit account.	1805	1,840*	1805	1,840*	Requesting publication of SIR after				
FEE CALCULATION	1251	110	2251	55	Examiner action Extension for reply within first month				
1. BASIC FILING FEE	1252	410	2252	205	Extension for reply within second month				
Large Entity Small Entity	1253	930	2253	465	Extension for reply within third month				
Fee Fee Fee Fee Fee Description Fee Paid	1254	1,450	2254	725	Extension for reply within fourth month				
Code (\$)   Code (\$)   1001 770   2001 385 Utility filing fee   385.00	1255	1,970	2255	985	Extension for reply within fifth month				
1002 340 2002 170 Design filing fee	1401	320	2401	160	Notice of Appeal				
1003 530 2003 265 Plant filing fee	1402	320	2402	160	Filing a brief in support of an appeal				
1004 770 2004 385 Reissue filing fee	1403	280	2403	140	Request for oral hearing				
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding				
SUBTOTAL (1) (\$) 385.00	1452	110	2452	55	Petition to revive – unavoidable				
(1) (2) 303.00	1453	1,300	2453	650	Petition to revive - unintentional				
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,300	2501	650	Utility issue fee (or reissue)				
Extra Fee from Claims below Fee Paid	1502	470	2502	235	Design issue fee				
Total Claims 32 -20** = 12 x 9.00 = 108.00	1503	630	2503	315	Plant issue fee				
Independent 4 -3** = 1 x 43.00 = 43.00	1460	130	1460	130	Petitions to the Commissioner				
Multiple Dependent = =	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)				
Large Entity Small Entity	1806	180	1806	180	Submission of Information Disclosure Stmt				
Fee Fee Code (\$) Fee Description	8021	40	8021	40	Recording each patent assignment per property (times number of properties)				
1202 18 2202 9 Claims in excess of 20	1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))				
1201   86   2201   43   Independent claims in excess of 3   1203   290   2203   145   Multiple dependent claim, if not paid	1810	750	2810	375	For each additional invention to be examined (37CFR 1.129(b))				
1204 86 2204 43 ** Reissue independent claims	1801	750	2801	375	Request for Continued Examination (RCE)				
over original patent  1205 18 2205 9 ** Reissue claims in excess of 20	1802	900	1802	900	Request for expedited examination of a design application				

**or number previously paid, if greater; For Reissues, see above			
SUBMITTED BY		Complete (	if applicable)
Name (Print/Type) Deborah A. Miller, Ph.D.	Registration No. (Attorney/Agent) 53,32	Z8 Telephone	(617) 439-2863
Signature Debot a Dan	ile	Date	January 28, 2004

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

Fee Transmittal

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 381982024 US, in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: January 28, 2004

Signature: (Deborah A. Miller, Ph.D.)

Dated: January 28, 2004

\* Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

SUBTOTAL (3) (\$)

0.00